

PTO-1449 SEP 17 2004 Information Disclosure Citation in an Application	Application No.	Applicant(s)	
	10/607,900	William W. King	
	Docket Number	Group Art Unit	Filing Date
	074263.0169	3672	June 27, 2003

U.S. PATENT DOCUMENTS

	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
A.	3752966	8/14/73	Foy et al.	175	40	5/28/71
B.	5318136	6/7/94	Roswell et al.	175	24	3/6/91
C.	5415030	5/16/95	Jogi et al.	175	39	4/8/94
D.	5474142	12/12/95	Bowden	175	27	4/19/93
E.	6349595	2/26/02	Civolani et al.	73	152.02	9/27/00
F.	6516293	2/4/03	Huang et al.	703	10	3/13/00
G.	6785641	8/31/04	Huang	703	7	10/11/00

FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
H.	479866	8/5/75	SU	E21B	45/00		X
I.	983258	12/23/82	SU	E21B	44/00		X
J.	3207012	12/29/83	DE (w/abstract)	E21B	44/00		X
K.	2611804	2/27/87	FR (w/abstract)	E21B	44/00		X
L.	3704077	8/13/87	DE (w/abstract)	E21B	44/00		X
M.	1479630	5/15/89	SU	E21B	44/00		X
N.	1795220	2/15/93	SU	E21B	44/00		X
O.	1796769	2/23/93	SU	E21B	44/00		X
P.	2265923	10/13/93	GB	E21B	12/02	X	
Q.	1231946	11/27/95	SU	E21B	44/00		X
R.	2328467	2/24/99	GB	E21B	7/00	X	
S.	2354852	4/4/01	GB	E21B	49/00	X	
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NON-PATENT DOCUMENTS

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PTO-1449 Information Disclosure Citation in an Application		Application No. 10/607,900		Applicant(s) William W. King		
		Docket Number 074263.0169		Group Art Unit 3672	Filing Date 6/27/03	

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U.S. PATENT DOCUMENTS							
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
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		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	H.	91/14214	9/19/91	WO	G05B	19/18	X	
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NON-PATENT DOCUMENTS		
	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
L.	French Preliminary Report for application no. FR 0203948. 5 pages	11/21/03
M.	W.W. Reynolds, "Economic Analysis of Drilling Plans and Contractors by Use of a Drilling Systems Approach", Journal of Petroleum Technology, XP-002261288, pages 787-793	7/1986
N.	M.R. Fassihi et al., "Risk Management for the Development of an Offshore Prospect", SPE 52975, XP-002261289, pages 1-6	3/20/99
O.	I.C. Pallister et al., "Asset Optimization Using Multiple Realizations and Streamline Simulation", Society of Petroleum Engineers – SPE 59460	
P.	Tom H. Hill et al., "Drilling Optimization: Practice makes perfect!", World Oil vol. 220, no. 4, XP-000831749, pages 63-64, 66, and 68.	4/1999
Q.	Ali G. Kadaster et al., "Drilling Time Analysis-A TQM Tool For Drilling in the '90s", Petroleum Engineer International vol. 65, no. 2, XP 000349995, pages 31-32, 35-38	2/1993
R.		

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PTO-1449		Application No. 10/607,900		Applicant(s) William W. King	
Information Disclosure Citation in an Application		Docket Number 074263.0169 (Old number 063718.0279)		Group Art Unit 3672	
				Filing Date 6/27/03	

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U.S. PATENT DOCUMENTS							
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
		1209299	12/19/16	Hughes	--	--	--
	B.	1263802	04/23/18	Reed	--	--	--
	C.	1394769	10/25/21	Sorensen	--	--	05/18/20
	D.	3660649	5/72	Gilchrist et al.	175	376	07/16/76
	A.	3761701	9/73	Wilder et al.	235	193	07/14/71
	E.	4056153	11/01/97	Miglierini	175	376	07/16/76
	B.	4479176	10/84	Grimshaw	364	148	02/08/82

FOREIGN PATENT DOCUMENTS							
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
	F.	0384734A	08/29/90	EP	E21B	10/16	YES X NO
	G.	2241266	08/28/91	GB	E21B	10/46	YES X NO
	H.	2371366 A	07/24/02	GB	E21B	44/00	YES X NO
	I.	1654515	03/29/88	SU (with translation)	E21B	10/16	YES X NO

NON-PATENT DOCUMENTS			
		DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
	J.	European Search Report for EP03021140.3; 6 pages	02/04/2004
	K.	Wilson C. Chin, "Wave Propagation in Petroleum Engineering" (1994)	1994
	L.	Brochure entitled: "Twist & Shout", Smith International, Inc., (SB2255.1001), 4 pages	Printed 06/2004
	M.	Adam T. Bourgoynne Jr et. al., "Applied Drilling Engineering", Society of Petroleum Engineers Textbook Series (1991)	1991
	N.	J. P. Nguyen, "Oil and Gas Field Development Techniques: Drilling" (translation 1996, from French original 1993)	1996
	O.	"Making Hole", part of Rotary Drilling Series, edited by Charles Kirkley (1983)	1983
	P.	"Drilling Mud", part of Rotary Drilling Series, edited by Charles Kirkley (1984)	1984
	Q.	H.G. Benson, "Rock Bit Design, Selection and Evaluation", presented at the spring meeting of the pacific coast district, American Petroleum Institute, Division of Production, Los Angeles, May, (1956)	05/1956
	R.	J.C. Estes, "Selecting the Proper Rotary Rock Bit", Journal of Petroleum Technology, Nov., (1971), pp1359-1367	11/1971
	S.	Sikarskie, et. al., "Penetration Problems in Rock Mechanics", American Society of Mechanical Engineers, Rock Mechanics Symposium, (1973)	1973

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<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; line-height: 100px; font-size: 24px; font-weight: bold;"> OIPE JC55 JUN 21 2004 PATENT & TRADEMARK OFFICE </div> </div>		Docket Number 074263.0169		Group Art Unit 3672		
				Filing Date 6/27/03		
U.S. PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	4617825	10/1986	Ruhovets	73	152.05	09/12/85
B.	4646240	02/1987	Serra et al.	364	422	04/07/86
C.	4694686	9/87	Fildes et al.	324	71	--
D.	4718011	01/1988	Patterson, Jr.	364	422	11/24/86
E.	4793421	12/88	Jasinski	175	27	07/13/87
F.	4794534	12/88	Millheim	175	40	08/08/85
G.	4794535	12/88	Gray et al.	364	420	08/18/86
FOREIGN PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
H.	1691497	05/30/88	SU (with translation)	E21B	10/16	X
I.	1020253	11/14/03	NL	-	-	X
J.						
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NON-PATENT DOCUMENTS						
	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)					DATE
L.	Dykstra, et. al., "Experimental Evaluations of Drill String Dynamics", Amoco Report Number SPE 28323, (1994)					1994
M.	Kenner and Isbell, "Dynamic Analysis Reveals Stability of Roller Cone Rock Bits", SPE 28314, (1994)					1994
N.	Bassiouni, Z., "Theory, Measurement, and Interpretation of Well Logs"; Richardson, TX 1994; 23 pgs.					1994
O.	Burke et al., "Computer Processing of Log Data Improves Production in Chaveroo Field"; pp. 889-895; <i>Journal of Petroleum Technology</i>					07/1967
P.	Doveton, J.D. et al., "Fast Matrix Methods for the Lithological Interpretation of Geophysical Logs", Geomathematical and Petrophysical Studies in Sedimentology; 17 pgs.					07/1978
Q.	Doveton, John D.: "Geologic Log Analysis Using Computer Methods" <i>AAGP Computer Applications in Geology</i> , No. 2: 30 pgs.					1994
R.	Harris, Martin H et al., "A Computer-Oriented Generalized Porosity-Lithology Interpretation of Neutron, Density and Sonic Log", 10 pgs.					02/1971
S.	Rider, Malcom; <i>The Geological Interpretation of Well Logs</i> , Second Edition; Gulf Publishing, Houston, 35 pgs.					1996
T.	Schlumberger Log Interpretation Principles/Applications: <i>Schlumberger Educational Services</i> ; 15 pgs.					1991
U.	Dewan, John T.; "Essentials of Moder Open-Hole Log Interpretation", pp. 210227, NL Industries Inc.					1983
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U.S. PATENT DOCUMENTS

	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	4845628	7/89	Gray et al.	364	420	08/18/86
B.	4852399	08/89	Falconer	73	151.5	07/13/88
A.	4875530	10/89	Frink et al.	175	27	03/24/89
C.	4876886	10/89	Bible et al.	73	151.5	04/04/88
D.	4914591	4/90	Warren et al.	175	40	--
E.	4916616	04/1990	Freedman et al.	364	422	12/08/86
F.	4926686	5/90	Fay	73	151	09/19/88
G.	4926950	05/90	Zijsling	175	39	12/20/88
H.	4928521	05/90	Jardine	73	152.43	03/27/89

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						YES	NO
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NON-PATENT DOCUMENTS

	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
K.	Franco, Victor Hugo, "Introduction to Wireline Log Analysis", Western Atlas International, Houston; pp 185-231	1992
L.	Crain, E.R.; "The Log Analysis Handbook, Volume One: Quantative Log Analysis Methods", PennWell, Tulsa, OK	1986
M.	Prammer, M.G. et al., "Measurements of Clay-Bound Water and Total Porosity by Magnetic Resonance Logging", SPE paper 36522	1996
N.	Oort, Eric Van, "Physico-Chemical Stabilization of Shales", SPE paper 37623	1996
O.	Smith, L. et al., "Successful Field Application of an Electro-Negative 'Coating' to Reduce Bit Balling Tendencies in Water Based Mud", SPE/IADC paper 35110	1996
P.	Glover, et al., "New Advances and Applications of Combining Simulation and Optimization", Proc. Winter Simulation Conference, pp. 144-152	12/1996
Q.	Hill et al., "Intelligent Drilling System for Geological Sensing", Proc. Of the IEEE/RSJ Int. Conf. On Intelligent Robots and Systems, Vol. 1, pp. 495-501	07/1993
R.	Hancke et al., "A Control System for Optimizing Deep Hole Drilling Conditions", Proc. IECON Inter. Conf. On Industrial Electronics, Control and Instrument", vol. 3, pp. 2279-2284.	11/1991
S.	Murphy, Don; "Selecting the Right Rotary Bit is the Place to Smart Cutting Costs", The Oils & Gas Journal, pp. 88-92.	02/03/69
T.	Foucault, Hubert et al., "An Integrated Drilling Optimazation for Faster and Higher Improvements in Oseberg South", Halliburton Energy Services; Hydro, 8 pages.	2003
U.	Jackson, R.A.; "Cost/Foot: Key to Economic Selection of Rock Bits", World Oil, pp. 83-85.	06/1972

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U.S. PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	4981037	1/91	Holbrook et al.	166	250	--
A.	5010789	4/91	Brett et al.	76	108.2	10/06/89
B.	5012674	5/91	Millheim et al.	-	-	--
C.	5216612	06/1993	Cornett et al.	364	468	07/16/90
D.	5216917	6/93	Detournay	175	39	--
E.	5239467	08/1993	Kelly et al.	364	421	02/19/92
F.	5251286	10/1993	Wiener et al.	395	22	03/16/92

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						YES	NO
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NON-PATENT DOCUMENTS	
	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)
I.	Estes, Jack C.; "Guidelines for Selecting Rotary Insert Rock Bit", Petroleum Engineer, pp. 30-34.
J.	Chambers, Robert et al., "Drilling Man's Guide to Better Bit Selection", Petroleum Engineer, pp. 100-108.
K.	Novig, T., "Factors Affecting Rock Bit Selection", Oil Gas Magazine
L.	Soemodihardjo, W. et al., "Application of an Expert System to Rotary Drilling Bit Selection", 1 st Victorian Dep. Of Manufacturing Ind. Dev., pp. II-17 through II-40.
M.	Dfendiyev, G.M. et al., "The Optimum Decision in Cutting-Type Drilling Bits Selection with Regard to their Operating Conditions and the Vagueness of the Task Pose", Energy Sources, Vol. 13, pp. 243-250.
N.	"Advanced Bit Engineering, Selection Lowers Drilling Cost", Petroleum Engineer No. 9, Vol. 65, p. 3.
O.	Falcao, J.L. et al., "PDC Bit Selection through Cost Prediction Estimates Using Crossplots and Sonic Log Data", SPE/IADC 25733, pp. 525-535.
P.	Pessier, R.C. et al., "Different Shales Dictate Fundamentally Different Strategies in Hydraulics, Bit Selection, and Operating Practices", SPE 28322, pp. 307-318.
Q.	Tewari, Shrikant, "Dull Bit Grading and Rock Strength Analysis Key to Bit Selection", Oil & Gas Journal, pp. 45-51.
R.	Hameed A. et al., "Deep Wells Bit Optimization", SPE/IADC 39269, pp. 197-203
S.	Perrin, V.P. et al, "Drilling-Index-A New Approach to Bit Performance Evaluation", SPE/IADC 37595, pp. 199-205.
T.	De Castro, F.J.N. et al., Evaluation of Drill Bit Performance Taking into Account the in Situ State of Stress", SPE International, pp. 1-8.

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A.	5282384	2/94	Holbrook	702	12	--	
B.	5305836	4/94	Holbrook et al.	175	39	04/08/92	
C.	5334833	08/1994	Case et al.	250	270	06/14/91	
D.	5369570	11/1994	Parad	364	401	11/14/91	
E.	5415030	5/95	Jogi et al.	175	39	--	
F.	5416697	05/1995	Goodman	364	422	07/31/92	
G.	5442950	8/95	Unalmiser et al.	73	38	10/18/93	

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H.							
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NON-PATENT DOCUMENTS		
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L.	Fabian, Robert T., "In Situ Compressive Strength Analysis as an Aid in Fixed Cutter Bit Selection and Performance". ASME International, pp. 86-94.	1997
M.	Xu, H.. et al., "A Method for Bit Selection y Modeling ROP and Bit-Life", The Petroleum Society, Paper 97-78, p. 1-8.	06/08/97
N.	Security DBS, "Design at the Customer Interface", brochure	1997
O.	Dekun, Ma et al., "Computer Simulation of the Interaction between Roller Bit and Rock", Proceedings of the International Meeting on Petroleum Engineering, Part 1 of 2; vol. 1, pp. 309-317; XP002266077	1995
P.	Warren, T.M.; "Factors Affecting Torque for a Roller Cone Bit", JPT J PET Technol., vol. 36, no. 10, pp. 1500-1508; XP002266079	06/1989
Q.	Sheppard, M.C et al., "Forces at the Teeth of a Drilling Rollercone Bit: Theory and Experiment", Proceedings: 1988 SPE Annual Tehnical Conference and Exhibition; vol. Delta, pp. 253-260, XP002266080	10/02/1988
R.	Steklyanov, A.V. et al., "Improving the Effectiveness of Drilling Tools", KhM-3 Oil Industry Machine Building, Moscow, pp. 1-35.	1991
S.	Pending U.S. Continuation Patent Application Serial No. 10/669,105 entitled "Method and System for Predicting Performance of a Drilling System for a Given Formation", filed September 23, 2003 by William A. Goldman et al. (Attorney Docket 074263.0170)	09/23/2003
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U.S. PATENT DOCUMENTS							
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	5449047	9/95	Schivley, Jr.	175	27	09/07/94	
B.	5458207	10/95	Mattero	175	27	04/21/92	
C.	5461562	10/1995	Tabanou et al.	364	422	06/21/94	
D.	5539704	07/1996	Doyen et al.	367	73	06/23/95	
E.	5608162	03/04/97	Ho	73	152.48	07/13/95	
F.	5660239	08/1997	Mueller	175	61	09/27/93	
G.	5704436	1/98	Smith et al.	175	27	03/25/96	

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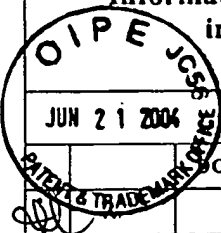
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A.		5767399	6/98	Smith et al.	702	10	--
B.		5794720	8/98	Smith et al.	-	-	--
C.		5845258	12/1998	Kennedy	705	8	06/16/95
D.		5963910	10/1999	Ulwick	705	7	09/20/96
E.		5965810	10/99	Holbrook	166	254	--
F.		6021859	2/00	Tibbitts et al.	175	431	--
G.		6026912	2/22/00	King et al.	-	-	--
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	6044327	03/28/00	Goldman	702	11	11/13/97
B.	6052649	04/18/00	Goldman et al.	702	11	05/18/98
C.	6109368	8/00	Goldman et al.	175	39	--
D.	6131673	10/17/00	Goldman et al.	175	40	03/26/98
E.	6155357	12/5/00	King et al.	-	-	--
F.	6169967	01/02/01	Dahlem et al.	703	10	09/04/98
G.	6233498	5/15/01	King et al.	-	-	--

FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
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NON-PATENT DOCUMENTS

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EXAMINER <i>Dang</i>	DATE CONSIDERED <i>3/18/2005</i>
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PTO-1449 Information Disclosure Citation in an Application		Application No. 10/607,900		Applicant(s) William W. King	
		Docket Number 074263.0169		Group Art Unit 3672	Filing Date 6/27/03

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 PATENT & TRADEMARK OFFICE

U.S. PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	6276465	8/21/01	Cooley et al.	-	-	--
B.	6374926	04/23/02	Goldman et al.	175	39	06/21/00
C.	6389360	5/02	Aft et al.	702	9	--
D.	6408953	06/25/02	Goldman et al.	175	39	08/28/00
E.	6424919	7/23/02	Moran et al.	-	-	--
F.	6612382	09/02/03	King	175	40	03/28/01
G.	2002/0120401	9/01	Macdonald et al.	702	6	--
H.	4096385	06/78	Marett	702	8	--
I.	4903527	02/90	Herron	702	8	--
J.	5205164	04/93	Steiger et al.	702	9	--
K.	5330016	07/94	Paske et al.	-	-	--
L.	2004/0059554	03/25/04	Goldman et al.	703	7	09/23/03

FOREIGN PATENT DOCUMENTS						
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PTO-1449 Information Disclosure Citation in an Application JUL 30 2003 U.S. PATENT & TRADEMARK OFFICE	Application No.	Applicant(s)	
	10/607,900	William W. King	
	Docket Number	Group Art Unit	Filing Date
	063718.0279		June 27, 2003

U.S. PATENT DOCUMENTS

	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
A.	3593807	7/71	Klima	173	6	
B.	3752966	8/73	Foy et al.	175	40	
C.	3971449	7/76	Nylund et al.	173	11	
D.	4064749	12/77	Pittman et al.	73	152	
E.	4195699	4/80	Rogers et al.	713	177	
F.	4354233	10/82	Zhukovsky et al.	173	6	
G.	4407017	9/83	Zhilikov et al.	173	6	
H.	4627276	12/86	Burgess et al.	175	39	
I.	4685329	8/87	Burgess	175	39	

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J.	0466255	1/92	EP				
K.	470593	8/75	RU				
L.	726295	4/80	RU				
M.	1716112	2/92	RU				

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	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
N.	E.M. Galle and H.B. Woods, "Best Constant Weight And Rotary Speed For Rotary Rock Bits", API Drilling and Production Practice, pp. 48-73	1963
O.	R. Teale, "The Concept Of Specific Energy In Rock Drilling", International Journal of Rock Mechanics, Mining Sciences, vol. 2, , Great Britain, pp. 57-63,	1965
P.	Howell Word and Marvin Fisbeck, "Drilling Parameters And The Journal Bearing Carbide Bit", Drilling--DCW, , first published Oct. 1979 in Tulsa, Oklahoma pp. 92-93,	Jan. 1980
Q.	R.C. Pessier, M.J. Fear, "Quantifying Common Drilling Problems With Mechanical Specific Energy and A Bit-Specific Coefficient Of Sliding Friction", SPE Paper 24584, Washington, D.C. pp. 373-388	Published Oct. 1982
R.	Michael A. Simpson, Sr., "Hand-Held Calculator Program Helps Optimize Drilling", World Oil, pp. 97-101	Apr. 1984
S.	Kenneth L. Mason, "3-Cone Bit Selection With Sonic Logs", SPE Drilling Engineering, first published Sep. 1984 in Houston, Texas, pp. 135-142	Jun. 1987

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PTO-1449		Application No. 10/607,900		Applicant(s) William W. King	
Information Disclosure Citation in an Application		Docket Number 063718.0279		Filing Date June 27, 2003	

U.S. PATENT DOCUMENTS

	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
A.	4694686	9/87	Fildes et al.	324	71	
B.	4793421	12/88	Jasinski	173	11	
C.	4845628	7/89	Gray et al.	702	9	
D.	4875530	10/89	Frink et al.	175	27	
E.	4914591	4/90	Warren et al.	175	40	
F.	4926686	5/90	Fay	175	39	
G.	4981037	1/91	Holbrook et al.	166	250	
H.	5010789	4/91	Brett et al.	700	159	
I.	5012674	5/91	Millheim et al.	324	201	

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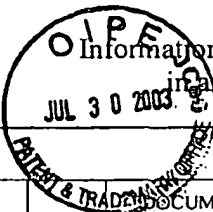
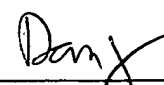
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K.	2343905	5/24/00	GB	-	-	-	-
L.	2360304	9/19/01	GB	-	-	-	-
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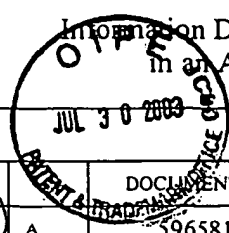

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	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
N.	Allen D. Gault, "Measurement of Drilling Properties", SPE Drilling Engineer, published New Orleans, Louisiana, Mar. 1985, pp. 143-148,	Jun. 1987
O.	T.M. Burgess, W.C. Lesso, "Measuring The Wear Of Milled Tooth Bits Using MWD Torque And Weight-On-Bit", SPE/IADC 13475, published Mar. 1985, New Orleans, Louisiana, pp. 453-458 for pages illustration	Mar. 1985
P.	Philip Holbrook, Michael Hauck, "Petrophysical--Mechanical Math Model Real-Time Wellsite Poor Pressure/Fracture Gradient Prediction", SPE Pub. No. 16666, published Sep. 1987 in Dallas, Texas.	Sep. 1987
Q.	E.C. Onyia, "Relationships between Formation Strength, Drilling Strength, and Electric Log Properties", SPE Drilling Engineering, pp. 605-618	Oct., 1988
R.	David A. Glowka, "Use of Single-Cutter Data in the Analysis of PDC Bit Designs: Part I--Development of a PDC Cutting Force Model", JPT, pp. 797-849	Aug. 1989
S.	David A. Glowka, "Use of Single-Cutter Data in the Analysis of PDC Bit Designs: Part II--Development of PDC WEAR Computer Code", JPT, pp. 850-859	Aug. 1989

EXAMINER <i>Dan</i>	DATE CONSIDERED 3/18/2005
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PTO-1449		Application No. 10/607,900		Applicant(s) William W. King		
		Docket Number 063718.0279		Group Art Unit	Filing Date June 27, 2003	
		U.S. PATENT DOCUMENTS				
	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
A.	5216917	6/93	Detournay	175	39	
B.	5282384	2/94	Holbrook	702	12	
C.	5305836	4/94	Holbrook et al.	175	26	
D.	5415030	5/95	Jogi et al.	175	39	
E.	5442950	8/95	Unalmiser et al.	73	152	
F.	5449047	9/95	Schivley, Jr.	173	11	
G.	5458207	10/95	Mattero	173	6	
H.	5704436	1/98	Smith et al.	173	6	
I.	5767399	6/98	Smith et al.	702	10	
FOREIGN PATENT DOCUMENTS						
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J.	2363145	12/12/01	GB	-	-	- -
K.	2363146	12/12/01	GB	-	-	- -
L.	2364083	1/16/02	GB	-	-	- -
M.	2365899	2/27/02	GB	-	-	- -
NON-PATENT DOCUMENTS						
	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)					DATE
N.	E. Detournay, P. Defourny, "A Phenomenological Model for the Drilling Action of Drag Bits", International Journal of Rock Mechanics, Mineral Sciences and Geomechanical Abstracts, vol. 29, No. 1, printed in Great Britain, pp. 13-23					1992
O.	Joe Kelly, Jr., "Use break-Even Analysis to Optimize Bit Runs", World Oil, pp. 75-79					Nov. 1992
P.	Geir Hareland and L.L. Hoberock, "Use of Drilling Parameters to Predict In-Situ Stress Bounds", SPE/IADC 25727, pp. 457-471					Feb. 1993
Q.	J.P.R. Sparr and L.W. Ledgerwood, harvey Goodman, R.L. Graff and T.J. Moo, "Formation Compressive Strength Estimates for Predicting Drillability and PDC Bit Selection", SPE/IADC 29397, Amsterdam, Netherlands, pp. 569-578					Published Feb. 1995
R.	R.V. Barragan, O.L.A. Santos and E.E. Maidla, "Optimization of Multiple Bit Runs", SPE/IADC 37644, pp. 579-589					Mar. 4, 1977
S.	R.K. Bratli, G. Hareland, F. Stene, G.W. Dunsæd and G. Gjelstad, "Drilling Optimization Software Verified in the North Sea", SPE 39007, 7 pages					Aug. 1997
EXAMINER 				DATE CONSIDERED 3/18/2005		
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Information Disclosure Citation in an Application 		Docket Number 063718.0279		Group Art Unit	Filing Date June 27, 2003	
		U.S. PATENT DOCUMENTS				
	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
A.	5965810	10/99	Holbrook	166	254	
B.	6021859	2/00	Tibbitts et al.	175	431	
C.	6109368	8/00	Goldman et al.	175	39	
D.	3660649	5/72	Gilchrist et al.	346	33R	
E.	3761701	9/73	Wilder et al.	702	9	
F.	4479176	10/84	Grimshaw	700	28	
G.	4794535	12/88	Gray et al.	702	9	
H.	6389360	5/02	Alft et al.	702	9	
I.	4794534	12/88	Millheim	175	40	
FOREIGN PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
J.	2370059	6/19/02	GB	-	-	- -
K.	2370060	6/19/02	GB	-	-	- -
L.	2371321	7/24/02	GB	-	-	- -
M.						
NON-PATENT DOCUMENTS						
	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)					DATE
N.	G. Gjeldstad, G. Hareland, K.N. Nikolaisen and R.K. Bratli, "The Method of Reducing Drilling Costs More Than 50 Percent", SPE 47342, 7 pages					Jul. 1998
O.	M.B. Ziaja and J.C. Roegiers, "Lithology Diagnosis Based on the Measurements of Drilling Forces and Moments at the Bit", IADC/SPE 47799, pp. 185-194					Sep. 1998
P.	H. Xu, T. Hatakeyama, T. Yonezawa and A. Suzuki, "Evaluation of Bit Performance Using an Advanced Drilling-Test System", IADC/SPE 47809, pp. 247-252					Sep. 1998
Q.	H.I. Bilgesu, U. Altmis, S. Ameri, S. Mohaghegh and K. Aminian, "A New Approach to Predict Life Based on Tooth or Bearing Failures", SPE 51082, pp. 253-257					Nov. 1998
R.	E.T. Koskie, Jr., P. Slagel and W. Lesso, Jr., "Monitoring MWD Torque Improved PDC Bit Penetration Rates", World Oil, pp. 61-67					1998
S.	R.K. Bratli, G. Hareland, F. STene, G.W. Dunsaed and G. Gjeldstad, "Drilling Optimization Software Verified in the North Sea", SPE LACPEC Conference					1997
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PTO 1448 <div style="border: 2px solid black; border-radius: 50%; width: 100px; height: 100px; display: flex; align-items: center; justify-content: center; margin: 10px auto;"> <div style="text-align: center;"> <p>O I P E</p> <p>Information Disclosure Citation</p> <p>JUL 30 2003</p> <p>Patent & Trademark Office</p> </div> </div>		Application No. 10/607,900		Applicant(s) William W. King	
Information Disclosure Citation in an Application		Docket Number 063718.0279		Group Art Unit Filing Date June 27, 2003	

U.S. PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
A.	2002/0120401	9/01	Macdonald et al.	702	6	
B.	6026912	2/22/00	King et al.	I	I	
C.	6155357	12/5/00	King et al.	I	I	
D.	6233498	5/15/01	King et al.	I	I	
E.	6276465	8/21/01	Cooley et al.	I	I	
F.	6424919	7/23/02	Moran et al.	I	I	
G.	5794720	8/98	Smith et al.	I	I	
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N.	K.K. Millheim, "The Role of the Simulator in Drilling Operations", SPE Drilling Engineering	Oct. 1986
O.	Dr. Alan J. Scott, "Online Animations of Time Evolving Physical Systems", Depart of Physics, University of Wisconsin-Stout	No Date
P.	G. Martin Milner and Glen Corser, "Data Processing and Interpretation While Drilling", AADE National Drilling Technical Conference	2001
Q.	Jim O'Hare and Osarumwense O.A. Aigbekaen Jr., "Design Index: A Systematic Method of PDC Drill-Bit Selection", IADC World Drilling	2000
R.	J Booth and M.M. Cook, "Meeting Future Drilling Planning and Decision Support Requirements: A New Drilling Simulator", SPE/IADC Drilling Conference	2001
S.	P.R. Rampersad, G. Hareland and P. Boonyapaluk, "Drilling Optimization Using Drilling Data and Available Technology", Society of Petroleum Engineers, Inc.	1994

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